

REMARKS/ARGUMENTS

Claims 7-9 and 11-15 and new Claim 16 are active in the case. Reconsideration is respectfully requested.

The present invention relates to solid pigment preparations.

Claim Amendments

New Claim 16 has been added. The new claim is a replicate of Claim 7 except for the use of the transitional language of "consisting essentially of," which narrows the scope of the claim. The amendment does not introduce new matter into the case. Entry of the new claim into the record is respectfully requested.

Invention

The present invention is directed to a pigment preparation which exhibits advantageous properties including high color strength and good dispersibility in a wide variety of materials. The pigment preparation also exhibits excellent attrition resistance, a minimal tendency to compact or clump, uniform particle size distribution, good pourability, flowability and meterability, and also dustlessness when handled. The preparation of the invention is a combination of 60 to 95 % by wt pigment (A) with two types of surfactants (B) and (C) of which (B) is at least one water-soluble anionic surface-active additive, which is present in an amount of 5 to 40 wt % and (C) is at least one nonionic surface-active additive in an amount of 0 to 20 wt %.

Claim Rejection, 35 USC 112

Claim 7 in its present form recites a solid pigment preparation in which the three components of (A), (B) and (C) in all instances sum up to 100 % by wt. It must be observed

that at a percent amount of 95 % by wt for component (A), the amount of component (B) can be 5 % by wt, while the amount of component (C) can be 0 % by wt. The sum of the percentage values is 100 % by wt. If the amount of (A) is 60 % by wt and the amount of (B) is 40 % by wt, the amount of component (C) must be 0 %. Again, the total is 100 % by wt. Arbitrarily, in the event the amount of component (A) is 60 % by wt and the amount of component (C) is 20 % by wt, then the amount of component (B) is fixed at 20 % by wt which is within the range of 5 to 50 % by wt for component (B). In all events, amounts of the three components can be selected from the ranges of values given to prepare a three component composition in which the sum of the components is 100 % by wt. Withdrawal of the rejection is respectfully requested.

Claim Rejection, 35 USC 103

Claims 7, 8 and 11-15 stand rejected based on 35 USC 103(a) as obvious over Takahashi et al, U. S. Patent 4,234,466. This ground of rejection is respectfully traversed.

Applicants emphasize that the pigment preparation is fundamentally a combination of at least pigment and at least one water-soluble anionic surface active agent. Optionally, at least one non-ionic surface-active agent can be present in the composition. The pigment composition can be used as a colorant in a variety of applications such as those described on page 13, lines 14 to 25 of the specification. On the other hand, the solid pigment formulation disclosed in the patent is prepared by first preparing a liquid composition comprised of at least one ethylenically unsaturated compound, at least one resin dissolved or dispersed therein and at least one pigment. Thereafter, the unsaturated monomer is subjected to suspension or bulk polymerization which produces a solid spherical pigment containing product. In other words, the polymerization of the ethylenically unsaturated polymerizable compound in the resin results in the encapsulation of the dispersed pigment component in the

composition. The patent nowhere discloses the concept or idea of combining a pigment with, specifically, at least one water soluble anionic surface active agent! How then, is one of skill in the art motivated by the patent not to combine a pigment with a resin and an unsaturated monomer, which eliminates any possibility of unsaturated monomer polymerization, but instead to combine a pigment with at least one anionic surface active agent? Applicants submit that no such motivation exists and that clearly the Takahashi et al patent does not obviate the present invention as claimed. Withdrawal of the rejection is respectfully requested.

Claim 9 stand rejected based on 35 USC 103(a) as obvious over Takahashi et al, U. S. Patent 4,234,466 in view of Sommer et al, U. S. Patent 5,112,404. This ground of rejection is respectfully traversed.

The Sommer et al patent discloses a pigment formulation comprised of at least one organic pigment combined with a compound having formula I and optionally an anionic, cationic or nonionic surface active agent and customary additives. The compound of formula I is discussed at the bottom of column 10 over into column 11 where it is stated that the compound described in the examples is either applied to pigments or used for dispersing pigments in stoving lacquer systems. Of the large number of systems, lacquer systems based on alkyd-melamine resin are known. The result in the case of the Sommer et al patent is a lacquered pigment formulation of reduced viscosity. In any event, the presence of a surfactant is of any category is optional. Clearly, the lacquer formulation of the patent does not suggest the present invention as claimed.

As to the combination of Sommer et al with Takahashi et al, it is not seen how the two references are properly combinable. As seen above with respect to Takahashi et al a resin composition is prepared that contains a dispersed pigment by the polymerization of an unsaturated monomer in the presence of a resin dispersed therein, along with pigment, to

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prepare a resin material containing fully encased pigment, while Sommer et al discloses no polymerization, but rather a pigment in a lacquer vehicle which optionally may contain a surfactant. Even if the references are combined, how do the patents lead one of skill in the art to the present invention in which at least one pigment is combined with at least one water soluble anionic surfactant with no lacquer or polymerized resin material being present? Applicants submit that no such motivation exists and that no embodiment of the present invention is obvious in view of the art of record. Withdrawal of the rejection is respectfully requested.

New Claim 16 is believed allowable over the art of record, because it is clear that the scope of the claim is essentially limited to the three components (A), (B) and (C) of the composition, which combination is not suggested by the cited prior art.


It is believed that the application is in proper condition for allowance. Early notice to this effect is earnestly solicited.

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